

Appl. No.: 10/789,252  
TC/A.U.: 3711 Docket No.: B04-06  
Reply to Office Action of May 9, 2005

### **REMARKS**

Claims 1 and 5-22 and new claim 23 appear in this application for the Examiner's review and consideration.

Claim 1 has been amended to recite the claim recitations of canceled claims 3 and 4. Support for the amended elements is found at least in the Specification, on page 6, lines 13-16. Claims 5, 6, 10, 12 and 14 have been amended to change their dependencies.

Claims 2-4 have been canceled without prejudice to Applicant's right to file one or more continuing applications directed to any subject matter not presently claimed. New claim 23 has been added. Support for the new claim is found at least in the Specification, on page 6, lines 13-16. No new matter has been added by these amendments.

### **Rejection Under 35 U.S.C. § 112, Second Paragraph**

Claim 3 was rejected under 35 U.S.C. § 112, second paragraph. Claim 3 has been canceled and the recitations of claim 3 have been incorporated into independent 1. Applicant believes that claim 1 is definite, as it is clear that the graphite nanostructures include graphite nanosheets having thin parallel sheets. One of ordinary skill in the art would understand this claim language as providing very small graphite structures that include, among other things, very small graphite sheets that are parallel to each other.

The rejection under 35 U.S.C. § 112, second paragraph, is therefore believed to have been overcome. Applicants respectfully request reconsideration and withdrawal thereof.

### **Rejection Over U.S. Pat. No. 6,561,928**

Claims 1, 2, 15, 16 and 17 were rejected under 35 U.S.C. § 102(e) as being anticipated over U.S. Pat. No. 6,561,928 to Binette *et al.* ("Binette"). Binette is generally directed to a golf ball with a multi-layer construction.

For claims to be rejected under 35 U.S.C. § 102(e), each and every element as set forth in the claims of the present invention must be found, either expressly or inherently, in a single prior art reference. Applicants respectfully submit that Binette does not disclose all the elements of the claimed invention.

Binette fails to disclose or suggest using exfoliated graphite in nanostructure form. One of ordinary skill in the art would understand the term nanostructure to mean a very small

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structure of the exfoliated graphite. The Examiner asserts that the specification does not provide a definition regarding dimensions for the term nanostructures. Applicant disagrees. The Examiner appears to be stating that anything can be measured in any size unit; for example, miles could be measured in inches. However, this is not practical as one would not measure a distance of miles in inches. Moreover, one of skill in the art would understand that the term "nano" as used to describe the claimed structures means that the structures are a very small size and are a structure of a size that one of ordinary skill in the art would normally measure in microns, nanometers and angstroms.

However, in an effort to further prosecution, Applicant has amended claim 1 to recite that the graphite nanostructures are exfoliated and comprise graphite nanosheets including thin parallel sheets having a thickness of less than 5 nanometers. Clearly, Binette fails to disclose or suggest using an exfoliated graphite, and moreover a graphite having nanosheets with parallel sheets having a thickness of less than 5 nanometers in an intermediate layer of a golf ball.

Accordingly, amended independent claim 1 is believed to be in condition for allowance for at least the reasons set forth above. Moreover, the remaining claims 15, 16 and 17 depend from claim 1 discussed above and add additional features. These claims are believed to be patentable for the totality of the claimed inventions therein and by virtue of their dependence from independent claim 1. As such, Applicants respectfully request that the rejection under 35 U.S.C. § 102(e) be reconsidered and withdrawn.

#### **Double Patenting Rejection**

The Examiner rejected claims 1, and 5-22 under the judicially created doctrine of obviousness-type double patenting over claims 1-52 of U.S. Pat. No. 6,802,784. Applicants submitted a terminal disclaimer with their response of January 28, 2005. The rejection of the claims under the judicially created doctrine of double patenting is now moot. Claims 1, and 5-22 should now be in condition for allowance.

#### **Conclusion**

Based on the remarks set forth above, Applicant believes that all of the rejections have been overcome and the claims of the subject application are in condition for allowance. Should the Examiner have any further concerns or believe that a discussion with the Applicant's attorney


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would further the prosecution of this application, the Examiner is encouraged to call the attorney at the number below.

No fee is believed to be due for this submission. However, should any required fees be due, please charge them to Acushnet Company Deposit Account No. 502309.

Respectfully submitted,

11 July 05  
Date

  
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